

SAFETY DATA SHEET

K-38

Revision Date: 05-Mar-2014

Revision Number: 14

1. Product and Company Identification

Product Name

Product Trade Name: K-38

Other Names

Synonyms: None

Product Code: HM000952

Recommended Use

Recommended Use Crosslinker

Uses Advised Against No information available

Company Name, Address and Contact Details

Manufacturer/Supplier Halliburton New Zealand
1 Paraite Rd,
Bell Block, New Plymouth
New Zealand Registration No.: 824207

E-Mail address: fdunexchem@halliburton.com

Emergency Telephone Number +64-6-7559274

New Zealand National Poisons Centre 0800 764 766 (24 hours)

2. Hazard(s) Identification

Statement of Hazardous Nature

Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulation 2001;
Not Classified as dangerous good according to NZS 5433:2012, UN, IMDG or IATA

Classification

6.1E (Oral) Acutely Toxic Substances

6.4A Irritating to the eye

6.8B Human reproductive or developmental toxicants

9.1D Slightly harmful in the aquatic environment

Hazard and Precautionary Statements

Hazard Pictograms



Signal Word

Warning

Hazard Statements

H303 - May be harmful if swallowed
 H319 - Causes serious eye irritation
 H361 - Suspected of damaging fertility or the unborn child
 H413 - May cause long lasting harmful effects to aquatic life

Precautionary Statements**Prevention**

P101 - If medical advice is needed, have product container or label at hand
 P102 - Keep out of reach of children
 P103 - Read label before use
 P104 - Read Safety Data Sheet before use
 P201 - Obtain special instructions before use
 P202 - Do not handle until all safety precautions have been read and understood
 P264 - Wash face, hands and any exposed skin thoroughly after handling
 P280 - Wear eye protection/face protection
 P281 - Use personal protective equipment as required

Response

P312 - Call a POISON CENTER or doctor/physician if you feel unwell
 P331 - Do NOT induce vomiting
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P337 + P313 - If eye irritation persists: Get medical advice/attention
 P308 + P313 - IF exposed or concerned: Get medical advice/attention

Storage

None

Disposal

P501 - Dispose of contents/container to an approved landfill

Contains

Substances	CAS Number	Substance HSNO Classification
Disodium octaborate tetrahydrate	12008-41-2	6.1E (Oral) 6.4A 6.8B 9.1D

2.3 Other Hazards

None known

3. Composition and Information on Ingredients

Substances	CAS Number	PERCENT (w/w)
Disodium octaborate tetrahydrate	12008-41-2	60 - 100%

4. First-Aid Measures

Requirements for First Aid or Medical Care**Inhalation**

If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

Eyes

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

Skin

Wash with soap and water. Get medical attention if irritation persists.

Ingestion

Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

Workplace Facilities Required

None

Relation to Health Effect**Most Important Symptoms/Effects**

May cause mild eye, skin, and respiratory irritation. Potential reproductive hazard.

Medical Attention and Special Treatment**Notes to Physician**

Treat symptomatically

5. Fire-fighting measures

Type of Hazard

Flammability Hazard

Non-flammable

5.1 Extinguishing media

Suitable Extinguishing Media

Water fog, carbon dioxide, foam, dry chemical.

Extinguishing media which must not be used for safety reasons

None known.

HAZCHEM Code

Hazchem Code: None Allocated

Special Protective Equipment and Precautions for Fire Fighters

Special Protective Equipment for Fire-Fighters

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

Special Exposure Hazards

Not applicable.

6. Spillage, Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Use appropriate protective equipment. Avoid creating and breathing dust.

See Section 8 for additional information

6.2 Environmental precautions

None known.

6.3 Methods and material for containment and cleaning up

Scoop up and remove.

6.4 Reference to other sections

See Section 8 and 13 for additional information.

7. Handling and Storage

7.1 Precautions for Safe Handling

Handling Precautions

Avoid creating or inhaling dust.

Handling Practices

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Approved Handlers

This product does NOT require an approved handler.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry location.

Store Site Requirements

No special controls required

Packaging

No special packaging required

8. Exposure Controls and Personal Protection

Workplace Exposure Standards**Exposure Limits**

Substances	CAS Number	New Zealand WES	ACGIH TLV-TWA
Disodium octaborate tetrahydrate	12008-41-2	Not applicable	2 mg/m ³

Engineering Controls**Engineering Controls**

Use in a well ventilated area.

Personal Protective Equipment (PPE)**Respiratory Protection**

Not normally needed. But if significant exposures are possible then the following respirator is recommended:

Dust/mist respirator. (N95, P2/P3)

Hand Protection

Normal work gloves.

Skin Protection

Normal work coveralls.

Eye Protection

Dust proof goggles.

Other Precautions

None known.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

9. Physical and Chemical Properties**9.1 Information on basic physical and chemical properties****Physical State:** Solid**Color:** White**Odor:** Odorless**Odor Threshold:** No information availablePropertyValuesRemarks/ - Method**pH:**

7.3

Freezing Point/Range

No data available

Melting Point/Range

No data available

Boiling Point/Range

No data available

Flash Point

No data available

Evaporation rate

No data available

Vapor Pressure

No data available

Vapor Density

No data available

Specific Gravity

2.9

Water Solubility

Soluble in water

Solubility in other solvents

No data available

Partition coefficient: n-octanol/water

No data available

Autoignition Temperature

No data available

Decomposition Temperature

No data available

Viscosity

No data available

Explosive Properties

No information available

Oxidizing Properties

No information available

9.2 Other information**VOC Content (%)**

No data available

10. Stability and Reactivity**10.2 Chemical Stability**

Stable

10.4 Conditions to Avoid

None anticipated

10.5 Incompatible Materials

None known.

10.6 Hazardous Decomposition Products

None known.

Hazardous Reactions**Hazardous Polymerization:**

Will Not Occur

11. Toxicological Information

Health Effect from Likely Routes of Exposure

Acute Toxicity

Inhalation	May cause respiratory irritation.
Eye Contact	May cause mild eye irritation.
Skin Contact	May cause mild skin irritation.
Ingestion	May cause abdominal pain, vomiting, nausea, and diarrhea.

Chronic Effects/Carcinogenicity Prolonged or repeated exposure may cause reproductive system damage. Prolonged or repeated exposure may cause embryo and fetus toxicity.

Toxicity Data

LD50 Oral: 2000 mg/kg; (rat)

Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Disodium octaborate tetrahydrate	12008-41-2	2 g/kg (Rat) 3450 mg/kg (Rat) 4080 mg/kg (Rat) 2550 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 2.03 mg/L (Rat) 5h > 2.01 mg/L (Rat) 4h (saturation)

Test species: Rat

12. Ecological Information

12.1 Toxicity

Ecotoxicity Effects

Product Ecotoxicity Data

No data available

Substance Ecotoxicity Data

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Disodium octaborate tetrahydrate	12008-41-2	EC50(3d): 52.5 mg/L (growth rate) (Pseudokirchnerella subcapitata) (Similar substance) EC50(72h): 66 mg/L (growth rate) (Phaeodactylum tricornutum) (Similar substance)	LC50(96h): 74 mg/L (Limanda limanda) (Similar substance) LC50(96h): 280 mg/L (Gila elegans) LC50(96h): 447 mg/L (Oncorhynchus kisutch) NOEC(32d): 11.2 mg/L (Pimephales promelas) (Similar substance) NOEC(34d): 5.6 mg/L (Danio rerio) (Similar substance)	EC50(3h): > 175 mg/L (activated sludge)	LC50(96h): 25.05 - 80.6 mg/L (Litopenaeus vannamei) (Similar substance) LC50(48h): 133 mg/L (Daphnia magna) (Similar substance) NOEC(28d): 32 mg/L (Chironomus riparius) (Similar substance) NOEC(14d): 18 mg/L (Daphnia magna) (Similar substance)

12.2 Persistence and degradability

The methods for determining biodegradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential

Substances	Log Pow
Disodium octaborate tetrahydrate	BCF 121 L/kg (filamentous algae) BAF 23 L/kg (plankton) BAF 21 L/kg (Chironomids) BAF 23 L/kg (amphipods) BAF 13 L/kg (crayfish) BAF 8 L/kg (bluegill and largemouth bass) (Similar substance)

12.4 Mobility in soil

No information available

Ecotoxicity Hazard Statements

Slightly harmful in the aquatic environment.

12.6 Other adverse effects**Endocrine Disruptor Information**

This product does not contain any known or suspected endocrine disruptors

13. Disposal Considerations**13.1 Waste treatment methods****Disposal Method****Contaminated Packaging**

Bury in a licensed landfill according to federal, state, and local regulations.

Follow all applicable national or local regulations. Contaminated packaging may be disposed of by: rendering packaging incapable of containing any substance, or treating packaging to remove residual contents, or treating packaging to make sure the residual contents are no longer hazardous, or by disposing of packaging into commercial waste collection.

14. Transport Information**IMDG/IMO**

UN Number:	Not restricted.
UN Proper Shipping Name:	Not restricted
Transport Hazard Class(es):	Not applicable

NZ 5433.1999

UN Number:	Not restricted.
UN Proper Shipping Name:	Not restricted
Transport Hazard Class(es):	Not applicable

IATA/ICAO

UN Number:	Not restricted.
UN Proper Shipping Name:	Not restricted
Transport Hazard Class(es):	Not applicable

Special Precautions for User None**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable**15. Regulatory Information****New Zealand Inventory of Chemicals**

All components listed on inventory or are exempt.

HSNO Approval Number

HSR003133

Group Name

Not Applicable

HSNO ControlsRefer to the NZ EPA website for more information: <http://www.epa.govt.nz>**Approved Handlers**

Not Applicable

Poisons Schedule:

S5

16. Other information, including date of preparation or last revision**The following sections have been revised since the last issue of this SDS**

Not applicable

Additional information

For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.

Key literature references and sources for data

www.ChemADVISOR.com/
NZ CCID

Revision Date:

05-Mar-2014

Revision Note

Not applicable

Disclaimer Statement

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End of Safety Data Sheet